

Abstract of the Disclosure

10 Intercalated graphite flake is prepared having enhanced exfoliation characteristics in terms of at least one of reduced exfoliation temperature and increased expanded volume (also referred to as "worm volume"). The method entails contacting graphite flake with an organic expansion aid either before immersing in an aqueous intercalant solution or by dissolving the expansion aid in the aqueous intercalant solution prior to subjecting graphite

15 flake to an electrolytic oxidation treatment therein. The graphite flake is subjected to electrolytic oxidation to provide intercalated graphite flake. Then, the intercalated graphite flake is recovered from the bulk of the intercalant solution and is preferably washed and further treated with a suitable surfactant in order to reduce the exposed gallery acids on the subsequently dried flake.

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